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EXAMINER
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KASSA, TIGABU

ART UNIT	PAPER NUMBER
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1619

NOTIFICATION DATE	DELIVERY MODE
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03/18/2010

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

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<b>Office Action Summary</b>	<b>Application No.</b> 10/526,692	<b>Applicant(s)</b> LEACH ET AL.	
	<b>Examiner</b> TIGABU KASSA	<b>Art Unit</b> 1619	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 22 October 2009.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 26,27,29-31,33-36,38-41,44-57 and 79 is/are pending in the application.
- 4a) Of the above claim(s) 33-36 and 38-40 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 26-27, 29-31, 41, 44-57, and 79 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                    | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)         | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

This Office Action is in response to the amendment filed on October 22, 2009. **Claims 26-27, 29-31, 33-36, 38-41, 44-57, and 79 are pending. Claims 26-27, 29-31, 41, 44-57, and 79 are under consideration in the instant office action.** Claims 33-36 and 38-40 remain withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claims. Claims 1-25, 28, 32, 37, 42-43, 58-78, and 80-82 are cancelled.

#### ***Maintained Rejections***

#### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically taught or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness

**Claims 26-27, 29-31, 41, 44-57, and 79 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maupin et al. (WO 02/50053, IDS reference) in view of Chetty et al. (Tetrahedron Letters 1969, 5, 307-309, IDS reference) and as evidenced by Gonzalez-Coloma et al. (Journal of Chemical Ecology 1995, 21 1255-1270).**

### *Applicant Claims*

Instant claims 26-27 and 29 recite a method of controlling pests using a compound of formula I, II, III, respectively. Instant claim 30 further specifies the functional groups of formula III and instant claim 31 specifies the compound eremophilone. Instant claims 44-46 specify the method of claim 26 wherein the amount of compound used is an effective amount. Instant claims 47-51 further specify the pests targeted in the method of claim 26. Instant claims 52-57 specify the mode of application of the compound used in the method of claim 26. Instant claim 79 recites a method of combating an already existing pest infection using the compound of formula I.

### *Determination of the Scope and Content of the Prior Art (MPEP §2141.01)*

Maupin et al. teach pesticidal sesquiterpenes which include eremophilone (formula III, page 20, lines 2-5). Pesticidal compositions teach include one or more of the teach eremophilane

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sesquiterpenes (page 33, lines 11-13). The compounds have deterrent, repellent and/or toxic effects on certain pest targets and may function as pest repellents or pest control agents, as well as pesticides (page 36, lines 29-31). The efficacy and quantity of a pesticidally effective amount for a given compounds maybe determined by routine screening procedures (page 37, lines 12-15). Additionally, the appropriateness of a compound of composition may be assessed by observing any adverse effects to the person applying the composition to an infested plant, animal, or environmental locus (page 37, lines 26-29). Maupin et al. also teach methods of using the eremophilane sesquiterpenes as pesticides (page 39, line 7). The compound or composition is administered in a pesticidally effective amount (page 39, lines 27-28). The amount, frequency and number of applications may depend on a variety of factors including, among other things the feeding habits of the pest (page 40, lines 11-16). Methods of application include spraying, atomizing, dusting, immersing, coating, dressing, scattering, and pouring (page 41, lines 8-9). The formulations may be used to kill or repel pests (page 42, line 1). The examiner notes that effective antifeedant amounts of the compound would result in either starving the pest (i.e. killing) or repelling the pest as it is forced to find food elsewhere. The antifeedant activity of sesquiterpines is also evidenced by Gonzalez-Coloma et al. in "Antifeedant and toxic effects of sesquiterpenes from *senecio plamensis* to Colorado potato beetle" (Journal of Chemical Ecology 1995, 21 1255-1270.; abstract). The formulation may kill or repel a pest by directly contacting the pest, may be induced into the atmosphere of the locus, or may be applied to a plant or inanimate object (page 42, lines 9-12). Certain embodiments encompass protection of homes, buildings or other structures from nuisance insects, such as termites (page 42, lines 13-14). The compound or composition may be applied to a locus within or outside including spraying onto

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floors or cupboards or soaking the ground outside the structure (page 42, lines 19-22).

Additionally, the compound or composition may be embedded within materials used to construct the structure, such as siding, wall studs, or beams (page 42, lines 22-24). Compounds or compositions taught may also be applied to the soil (page 43, line 25). These application methods would include applying the composition around the site or mixing with a layer of soil at the site. They would also include application to sites prior to and after infestation.

***Ascertainment of the Difference Between Scope the Prior Art and the Claims  
(MPEP §2141.012)***

Maupin et al. teach that other compounds instead of or in addition to the instantly selected species may also be used in pest control. The examiner notes, however, that the instantly selected species was taught by Chetty et al. in “7a(H)-Eremophila-1,11-dien-9-one. A New sesquiterpene for the Eremophilane Type.” (Tetrahedron Letters 1969, 5, 307-309).

***Finding of Prima Facie Obviousness Rationale and Motivation  
(MPEP §2142-2143)***

It would be obvious to the skilled artisan to use eremophilone in a method to control pests because Maupin et al. teaches its use to control pests. The skilled artisan would have been motivated to use eremophilone specifically, because it is taught by Chetty et al. Specifically, Chetty et al. teach that the compound was found in a small tree known as Eremophila mitchelli. Plants are commonly known to produce compounds which are effective against infestations, diseases, and other threats the plant faces. Therefore, it is not surprising that eremophilone would be effective at controlling pests, particularly pests known to infest wood, e.g. termites. The

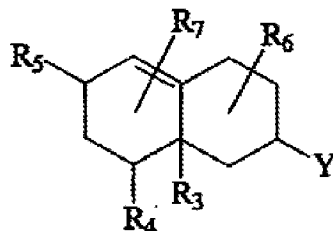
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skilled artisan would have a reasonable chance of expectation of success because Maupin et al. teach every limitation of the instantly claimed invention.

***Response to arguments***

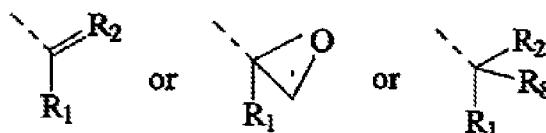
Applicants' arguments along with the declaration provided under 37 C.F.R. § 1.132 by Robert Spooner-Hart filed on 10/22/09 have been fully considered but they are not persuasive. Since Applicants' arguments incorporate the assertions from the declaration, the examiner provides his rebuttal arguments to Applicant's arguments and to the declaration together as set forth below. *Applicants argue that the compounds of Maupin et al., which are taught as having pesticidal activity against fleas, ticks and mosquitoes, differ from those of the present invention in at least the features 1-5 listed in applicants' response page 12.* The examiner respectfully disagrees with applicants' assertions because applicants clearly resorted to attacking the references individually while the rejections are based on the combination teachings of Maupin et al. and Chetty et al. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). **The examiner contends that applicants did not really compare the structures that the examiner depended on the previous rejections.** The structures that applicants compared from Maupin et al. may differ with the structure of the instant applications, however, the examiner reminds applicants that Maupin et al. did definitely teach structures that resemble to the compounds of the instant applications. Maupin et al. clearly teaches structures that clearly encompass the instantly claimed compounds as follows

Certain other exemplary pesticidal eremophilane sesquiterpenes are represented by Formula III:



Formula III

where Y is



and, similar to the R-groups of Formula I,  $R_1$ ,  $R_2$ ,  $R_3$ ,  $R_4$ ,  $R_5$ ,  $R_6$ ,  $R_7$ , and  $R_8$  are each independently H, =O, -OH, lower aliphatic, lower aliphatic alcohol, lower aliphatic thiol, carbonyl containing lower aliphatic, thiocarbonyl containing lower aliphatic, lower aliphatic ether, or lower aliphatic epoxide. Additionally, the eremophilane ring structures of compounds described by Formula III may contain double-bonds as described with respect to Formulas I and II.

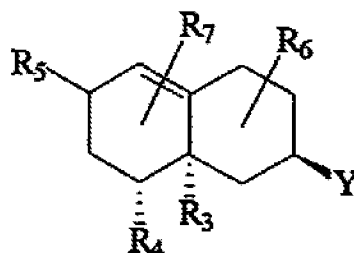
The compounds of Formula III form a subset of the compounds described by Formulas I and II, and all chemical substitutions and modifications discussed in relation to Formulas I and II are possible at the corresponding structure positions on

Formula III

Please see the whole page 20



In some embodiments, a compound according to Formula III is a specific stereoisomer, such as:



In some embodiments, lower aliphatic is a lower alkyl; lower aliphatic alcohol is a lower alkyl alcohol; lower aliphatic thiol is a lower alkyl thiol; lower aliphatic carboxylic acid is a lower alkyl carboxylic acid; carbonyl containing lower aliphatic is a lower carbonyl containing alkane; thiocarbonyl containing lower aliphatic is a lower thiocarbonyl containing alkane; lower aliphatic ether is a lower alkane ether; and lower aliphatic epoxide is a lower alkane epoxide.

In some embodiments, R<sub>3</sub>, R<sub>4</sub>, R<sub>5</sub>, R<sub>6</sub>, R<sub>7</sub>, and R<sub>8</sub>, are independently =O, –OH, lower aliphatic alcohol, carbonyl containing lower aliphatic, lower aliphatic ether, or lower aliphatic epoxide. In alternative embodiments, several of R<sub>3</sub>, R<sub>4</sub>, R<sub>5</sub>, R<sub>6</sub>, R<sub>7</sub>, and R<sub>8</sub>, are substituents and the others are H. For example, R<sub>3</sub>, R<sub>4</sub>, and R<sub>5</sub> can be substituents and the others H. In particular embodiments, R<sub>5</sub> is =O, –OH, lower aliphatic, lower aliphatic alcohol, carbonyl-containing lower aliphatic, lower aliphatic ether, or lower aliphatic epoxide. In more particular embodiments, R<sub>5</sub> is =O, or –OH and R<sub>3</sub>, and R<sub>4</sub> are lower aliphatic, such as lower alkyl (e.g., methyl or ethyl).

Please see the whole page 21

Maupin et al. clearly teach structures that resemble and encompass to the instantly claimed compounds as clearly showed above. However, Maupin et al. teach other compounds instead of or in addition to the instantly selected species may also be used in pest control. It is for this reason that the examiner brought into the rejections Chetty et al. The examiner notes, however, that the instantly selected species was taught by Chetty et al. in “7a(H)-Eremophila-1,11-dien-9-one. A New sesquiterpene for the Eremophilane Type.” (Tetrahedron Letters 1969, 5, 307-309). Obviousness can be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so *In re Kahn*, 441 F.3d 977, 986, 78 USPQ2d 1329, 1335 (Fed. Cir. 2006). The test for obviousness is what the combined teachings of the references would have suggested to one of ordinary skill in the art, and all teachings in the prior art must be considered to the extent that they are in analogous arts. In the instant case, Chetty et al. clearly cured the deficiency of Maupin et al. for not teaching the elected species in single embodiment rather in genus disclosure. Specifically, Chetty et al. teach that the compound was found in a small tree known as *Eremophila mitchelli*. Plants are commonly known to produce compounds which are effective against infestations, diseases, and other threats the plant faces. Therefore, it is not surprising to one of ordinary skill in the art to recognize that eremophilone such as the one taught by Chetty et al. would be effective at controlling pests, particularly pests known to infest wood, e.g. termites.

*Applicants also argue that Chetty et al. describes the isolation of eremophilone compounds of the present invention from Eremophila mitchelli. However, the reference merely describes the isolation of the compounds and their structure. There is no teaching or suggestion of their biological activity and, based on Cherty et al., one of ordinary skill in the art would have*

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*had no reason to believe that the compounds could be pesticidal, particularly against wood associated pests such as termites.* The examiner respectfully disagrees with applicants' assertions because applicants again are clearly resorted to attacking the references individually while the rejections are based on the combination teachings of Maupin et al. and Chetty et al. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). The examiner clearly addressed applicants argument as set forth above in the previous paragraph. However, Maupin et al. teach a subgenus of this class of compounds encompassing all the possible stereoisomers. The examiner notes that the genus structure for this class of compounds claimed in the instantly recited method carry three stereogenic carbons, which can result in eight possible stereoisomers. One of ordinary skill in the art based on the teachings of Maupin et al. clearly stating that this class of compounds can be used for control of pests would have easily envisaged testing all the eight possible stereoisomers for pesticidal activity given the limited permutations. One of ordinary skill in the art can easily predict that at least one of the eight stereoisomers and may be more will have the desired activity. Chetty et al. teach applicants' elected species, which is also a species of the genus structure taught by Maupin et al. having the stereochemistry of one of the eight possibilities. Furthermore, one of ordinary skill in the art would test the compound of Chetty et al. because, specifically, Chetty et al. teach that the compound was found in a small tree known as *Eremophila mitchelli*. Plants are commonly known to produce compounds which are effective against infestations,

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diseases, and other threats the plant faces. Therefore, it is not surprising that eremophilone would be effective at controlling pests, particularly pests known to infest wood, e.g. termites.

*Applicants also argue that although the broad disclosure of Maupin et al. may encompass the compounds, there is no specific disclosure of the claimed compounds having the stereochemistry as shown in the claims. Moreover, a person skilled in the art would realize that the compounds exemplified by Maupin et al. have a distinctly different three dimensional structure where the positions of the substituents are different and the shapes of the A and B rings are different from those of the present invention. Furthermore, it is well known in the chemical and biological fields that one enantiomer or diastereomer of a compound may have biological activity and the other enantiomer or another diastereomer may have none or very little activity.*

The examiner respectfully disagrees with applicant's assertions because compounds which are position isomers (compounds having the same radicals in physically different positions on the same nucleus) or homologs (compounds differing regularly by the successive addition of the same chemical group, e.g., by -CH<sub>2</sub>- groups) are generally of sufficiently close structural similarity that there is a presumed expectation that such compounds possess similar properties. In re Wilder, 563 F.2d 457, 195 USPQ 426 (CCPA 1977). See also In re May, 574 F.2d 1082, 197 USPQ 601 (CCPA 1978) **(stereoisomers prima facie obvious)**. Furthermore, prior art structures do not have to be true homologs or isomers to render structurally similar compounds prima facie obvious. In re Payne, 606 F.2d 303, 203 USPQ 245 (CCPA 1979). However, Maupin et al. teach a subgenus of this class of compounds encompassing all the possible stereoisomers. The examiner notes that the genus structure for this class of compounds claimed in the instantly recited method carry three stereogenic carbons, which can result in eight possible stereoisomers.

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One of ordinary skill in the art based on the teachings of Maupin et al. clearly stating that this class of compounds can be used for control of pests would have easily envisaged testing all the eight possible stereoisomers for pesticidal activity given the limited permutations. One of ordinary skill in the art can easily predict that at least one of the eight stereoisomers and may be more will have the desired activity. Chetty et al. teach applicants' elected species, which is also a species of the genus structure taught by Maupin et al. having the stereochemistry of one of the eight possibilities. Furthermore, one of ordinary skill in the art would test the compound of Chetty et al. because, specifically, Chetty et al. teach that the compound was found in a small tree known as *Eremophila mitchelli*. Plants are commonly known to produce compounds which are effective against infestations, diseases, and other threats the plant faces. Therefore, it is not surprising that eremophilone would be effective at controlling pests, particularly pests known to infest wood, e.g. termites.

*Applicants also argue that the term "sesquiterpene" is a very broad term that encompasses terpenes that consist of three isoprene units and have a basic molecular formula  $C_{15}H_{24}$ . Sesquiterpenes may be monocyclic, bicyclic or tricyclic and have varied structures. 2,10-bisaboladien-1-one is a monocyclic sesquiterpene and 11 $\beta$ -acetoxy-5-angeloyloxy-silphinen-3-one is a tricyclic sesquiterpene. Neither compound is a fused bicyclic sesquiterpene compound similar to the eremophilone compounds of the present invention. Moreover, it is not possible to conclude that all sesquiterpenes have insect antifeedant.* The examiner respectfully disagrees with these assertions because the examiner reminds applicants that the rejection is based on the combined teachings of Maupin et al. and Chetty et al. Gonzalez-Coloma is merely incorporated as an evidentiary reference to prove that it is commonly known in the art "sesquiterpene" is

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known to have an insect antifeedant properties. One of ordinary skill in the art from the teachings of Gonzalez-Coloma would have had a reasonable expectation of a bicyclic sesquiterpene to have similar properties as monocyclic and tricyclic sesquiterpene because they are all structurally related, especially in the absence of evidence to the contrary.

Applicants also present data relating to the termiticidal activity of 9-carbonyl-eremophilone compounds that supports the unpredictability of bioactivity of sesquiterpene compounds and the importance of the 9-oxo group or a tautomer thereof in the compounds used in the methods of the present application (table 1, page 3). Applicant relying upon comparative showing to rebut prima facie case must compare his claimed invention with closest prior art *In re Holladay*, 584 F.2d384, 199 USPQ 516 (CCPA 1978); *Ex parte Humber*, 217 USPQ 265 (Bd. App. 1961). Applicants did not compare their data with Maupin et al. Applicant, who neither established nor asserted that teachings of two closest prior art references are so parallel to one another that testing against one would show relative effectiveness of claimed invention over other, did not provide adequate basis to rebut conclusion of obviousness. Showing unexpected results over one of two equally close prior art references will not rebut prima facie obviousness unless the teachings of the prior art references are sufficiently similar to each other that the testing of one showing unexpected results would provide the same information as to the other. *In re Johnson*, 747 F.2d 1456, 1461, 223 USPQ 1260, 1264 (Fed. Cir. 1984).

Applicants have not demonstrated how their process is patentably distinct from the cited prior arts nor do the claims as currently written distinguish the instant invention over the prior arts. In light of the forgoing discussion, one of ordinary skill in the art would have concluded that the subject matter defined by the instant claims would have been obvious within the meaning of

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35 USC 103(a). Therefore, the invention as a whole would have been *prima facie* obvious to one of ordinary skill in the art at the time the invention was made, as evidenced by the references, especially in the absence of evidence to the contrary.

### **Double Patenting**

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

**Claim 26-27 and 29-31 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 13-16, 19-20,32-33, and 37-38 of U.S. Patent No. 7129271 in view of Chetty et al. (Tetrahedron Letters 1969, 5, 307-309, IDS reference).**

Although the conflicting claims are not identical, they are not patentably distinct from each other because applicant's claim in instant claims 26-27 and 29 recite a method of controlling pests using a compound of formula I, II, III, respectively. Instant claim 30 further

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specifies the functional groups of formula III and instant claim 31 specifies the compound eremophilone.

U.S. Patent No. 7129271 teaches a method of controlling pests using a pesticidally effective amount of eremophilane sesquiterpene of the indicated structure which includes the instantly selected species, eremophilone (see claims 13-16, 19-20, 32-33, and 37-38). This teaching differs from the instantly claimed invention in that U.S. Patent No. 7129271 also teaches other possible structures in addition to the instantly elected species.

It would be obvious to the skilled artisan to use eremophilone in a method to control pests because U.S. Patent No. 7129271 teaches its use to control pests. The skilled artisan would have been motivated to use eremophilone specifically, because it is taught by Chetty et al. Specifically, Chetty et al. teach that the compound was found in a small tree known as *Eremophila mitchelli*. Plants are commonly known to produce compounds which are effective against infestations, diseases, and other threats the plant faces. Therefore, it is not surprising that eremophilone would be effective at controlling pests, particularly pests known to infest wood, e.g. termites. The skilled artisan would have a reasonable chance of expectation of success because U.S. Patent No. 7129271 teaches in a very similar manner the limitations of the instantly claimed invention.

### ***Response to arguments***

Applicants argue the same arguments set forth above to rebut the double patenting rejections. The examiner incorporates the above rebuttal arguments by reference since they clearly apply in this section too since applicants argue the same thing as above.



**Conclusion**

Claims 26-27, 29-31, 41, 44-57, and 79 are rejected, while claims 33-36 and 38-40 are withdrawn. Claims 1-25, 28, 32, 37, 42-43, 58-78, and 80-82 are cancelled. No claims are allowed.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to TIGABU KASSA whose telephone number is (571)270-5867. The examiner can normally be reached on 9 am-5 pm Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Yvonne P. Eyler can be reached on 571-272-0871. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Tigabu Kassa  
/YVONNE L. EYLER/  
Supervisory Patent Examiner, Art Unit 1619

02/19/10